

EXFO FBK-103 Specs

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EXPERTISE REACHING OUT

Introducing EXFO's FiberBasix testers, a series of handheld instruments designed to meet your basic day-to-day test requirements while helping you stay within budget. These worry-free, straightforward solutions provide the tools you need to accurately measure signal attenuation during fiber-optic cable installation.

EXFO FiberBasix 100 TEST KITS

Pocket-sized Optical Test Kits

The FiberBasix 100 series includes two highly convenient instruments: The ELS-100 Light Source, combining up to four wavelengths and available in four specific configurations The EPM-100 Power Meter, which offers high accuracy and referencing capabilities.

FTTx Ready

EXFO's FiberBasix testers allow for the testing of passive optical networks (PONs) at 1310 nm, 1490 nm and 1550 nm, the three wavelengths recommended by the ITU-T (G.983.3) for PONs.



ORDERING INFORMATION

FBK-101	<i>FiberBasix 100 LAN Test Kit</i>	\$1,200.00
Kit Includes: EPM-102 Power Meter, Ge detector, ELS-100-12D Light Source, 850/1300 nm LED (1 port), One Test Jumper, Carrying case GP-10-061		
FBK-102	<i>FiberBasix 100 Outside Plant Test Kit</i>	\$1,995.00
Kit Includes: EPM-102 Power Meter, Ge detector, ELS-100-23BL Light Source, 1310/1550 nm laser (1 port), One Test Jumper, Carrying case GP-10-061		
FBK-103	<i>FiberBasix 100 Contractor Test Kit</i>	\$2,500.00
Kit Includes: EPM-102 Power Meter, Ge detector, ELS-100-12D-23BL Light Source, 850/1300 nm LED and 1310/1550 nm laser (2 ports), One TJ-B Test Jumper, One TJ-D Test Jumper, Carrying case GP-10-061		
FBK-105	<i>FiberBasix 100 CATV Test Kit</i>	\$2,025.00
Kit Includes: EPM-102 Power Meter, high-power Ge detector, ELS-100-23BL Light Source, 1310/1550 nm laser (1 port), One TJ-B Test Jumper, Carrying case GP-10-061		

The FiberBasix 100 series includes two highly convenient instruments:

- The **ELS-100 Light Source**, combining up to four wavelengths and available in four specific configurations
- The **EPM-100 Power Meter**, which offers high accuracy and referencing capabilities

EXFO ELS-100 LIGHT SOURCE

Multiwavelength Capability

The EPM-100 Power Meter provides highly accurate power measurements, as well as reference value setting capabilities. What's more, this convenient unit requires no offset nulling, and offers power autonomy of 300 hour, for reliable, long-lasting performance in the field.



SPECIFICATIONS

Model	23BL	12D
Wavelength (nm)	1310 ± 20 1550 ± 20	850 ± 25 1300 +50/-10
Emitter Type	LED	Laser
Connector Styles	EXFO Univ. Intrfc.	

ORDERING INFORMATION

ELS-100-12D-23	<i>850/1300nm LED (62.5/125µm), 1310/1550nm laser (9/125µm)</i>	\$2,100.00
ELS-100-12D	<i>850/1300nm LED (1 port)</i>	\$725.00
ELS-100-23BL	<i>1310/1550nm Laser (9/125µm)</i>	\$1,500.00

EXFO EPM-100 POWER METER

High Accuracy and Easy Referencing

EXFO's ELS-100 Light Source provides excellent stability and high measurement accuracy for up to three singlemode wavelengths or two multimode wavelengths. It is the perfect complement to the FiberBasix EPM-100 Power Meter when it comes to measuring attenuation on fiber-optic links.



SPECIFICATIONS

Model	EPM-102	EPM-102X
Power range (dBm)	10 to -60	26 to -50
Detector	Ge	GeX
Data Storage (Items)	N/A	N/A



EXPERTISE REACHING OUT

ORDERING INFORMATION

EPM-102	<i>Power Meter (Ge detector)</i>	\$485.00
EPM-102X	<i>High-Power (Ge detector)</i>	\$525.00

EXFO POWER METERS & LIGHT SOURCES

EXFO FiberBasix 500 TEST KITS

The Choice Solution for Network-Link Certification

Like all EXFO portable instruments, FiberBasix 500 handhelds are built for top ruggedness and convenience, perfect for the harshest test conditions. They feature a keypad/LCD backlight, for easy operation in darker environments, rechargeable batteries and interchangeable connectors.

Rugged, Reliable, Convenient.

Like all EXFO portable instruments, FiberBasix 500 handhelds are built for top ruggedness and convenience, perfect for the harshest test conditions. They feature a keypad/LCD backlight, for easy operation in darker environments, rechargeable batteries and interchangeable connectors.



The FiberBasix 500 series includes two highly convenient instruments:

- The **ELS-500 Light Source**, combining up to four wavelengths and available in four specific configurations
- The **EPM-500 Power Meter**, which offers high accuracy and referencing capabilities

ORDERING INFORMATION

FBK-501-XX	<i>LAN Test Kit with data storage/transfer</i>	\$2,000.00
Kit Includes: EPM-502-XX Power Meter, Ge detector, ELS-100-12D-XX Light Source, 850/1300 nm LED (1 port), One TJ-DXX-XX Test Jumper, Carrying case (GP-10-061), One FOA-XX, One EUI-XX		
FBK-502-XX	<i>Outside Plant Test Kit with data storage/transfer</i>	\$2,750.00
Kit Includes: EPM-502-XX Power Meter, Ge detector, ELS-100-23BL-XX Light Source, 1310/1550 nm laser (1 port), One TJ-BXX-XX Test Jumper, Carrying case (GP-10-061), One FOA-XX, One EUI-XX		
FBK-503-XX	<i>Contractor Test Kit with data storage/transfer</i>	\$3,100.00
Kit Includes: EPM-502-XX Power Meter, Ge detector, ELS-100-12D-23BL-XX Light Source, 850/1300 nm LED and 1310/1550 nm laser (2 ports), One TJ-BXX-XX Test Jumper, One TJ-DXX-XX Test Jumper, Carrying case (GP-10-061), One FOA-XX, Two EUI-XX		
FBK-504-XX	<i>Premium LAN Test Kit with data storage/transfer</i>	\$2,830.00
Kit Includes: EPM-502-XX Power Meter, Ge detector, ELS-500-12D-XX Light Source, One TJ-DXX-XX Test Jumper, Carrying case (GP-10-061), One FOA-XX, One EUI-XX		
FBK-505-XX	<i>Premium Outside Plant Test Kit with data storage/transfer</i>	\$3,100.00
Kit Includes: EPM-502-XX Power Meter, Ge detector, ELS-500-23BL-XX Light Source, 1310/1550 nm laser (1 port), One TJ-BXX-XX Test Jumper, Carrying case (GP-10-061), One FOA-XX, One EUI-XX		
FBK-506-XX	<i>Premium Contractor Test Kit with data storage/transfer</i>	\$3,591.00
Kit Includes: EPM-502-XX Power Meter, Ge detector, ELS-500-12D-23BL-XX Light Source, 850/1300 nm LED and 1310/1550 nm laser (2 ports), One TJ-BXX-XX Test Jumper, One TJ-DXX-XX Test Jumper, Carrying case (GP-10-061), One FOA-XX, Two EUI-XX		

EXFO ELS-500 LIGHT SOURCE

Multiwavelength Testing Capability

The EXFO's ELS-500 Light Source provides excellent stability and high measurement accuracy with your choice of two wavelengths (850/1300 nm or 1310/1550 nm) on a single port, or four wavelengths (850/1300 nm and 1310/1550 nm) on two ports. With its automatic wavelength switching mode, it is the perfect complement to the EPM-500 Power Meter when it comes to quickly and easily measuring attenuation on fiber-optic links.

SPECIFICATIONS

Model	12D	23BL
Wavelength (nm)	850 ± 25 1300 +50/-10	1310 ± 20 1550 ± 20
Emitter Type	LED	Laser
Connector Styles	EXFO Universal Interface	



ORDERING INFORMATION

ELS-500-12D23BL	<i>850/1300nm LED Fiber D, 1310/1550nm Laser</i>	\$2,850.00
ELS-500-23BL	<i>1310/1550nm Laser, 9/125mm</i>	\$2,200.00

EXFO EPM-500 POWER METER

High Accuracy and Easy Referencing

The EPM-500 Power Meter provides highly accurate power measurements, as well as reference value setting capabilities. What's more, this convenient unit requires no offset nulling, for reliable, long-lasting performance in the field. When paired with an ELS-500 Light Source used in Auto-Switching mode, the power meter allows for semi-automated loss measurement, providing easy, error-free testing.

SPECIFICATIONS

Model	EPM-502
Power range (dBm)	10 to -70
Detector	Ge
Data Storage (Items)	Up to 1000



ORDERING INFORMATION

EPM-502-XX	<i>Power Meter (Ge Detector)</i>	\$1,150.00
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NOYES MLP SERIES OPTICAL LOSS KITS

MLP1 Fiber Optic Loss Test Kits

Basic Multimode Test Kit

The MLP1 test kits are inexpensive solutions for testing multimode and single-mode systems. By joining the OPM1 optical power meter and the OLS1 optical light source, the MLP1 is a great kit for beginners or network owners. Two versions of the MLP1 test kit are available for testing Premises networks, LAN, and Gigabit Ethernet. The MLP1-1S test kit includes the OPM1-2C power meter and OLS1-1C light source. The MLP1-2 test kit combines the OPM1-2C optical power meter and OLS1-2C optical light source.

Test Kit Model	MLP 1-1S		MLP 1-2	
Optical Light Source	OLS 1-1C		OLS 1-2C	
Wavelength (nm)	660 - red	850 + 35/-40	850 + 35/-40	1300 + 50/-10
Emitter type	Class 1 (IEC 60825 - 1)			
Connector	ST			
Optical Power Meter	OPM 1-2C			
Power Range	+6 to -60 dBm			
Detector	Ge			

ORDERING INFORMATION

MLP1-1S-ST	<i>MLP1-1S Test Kit, ST connector</i>	\$799.00
MLP1-2-ST	<i>MLP1-2 Test Kit, ST connector</i>	\$995.00

Test jumpers and connector adapters are required for operation (purchased separately).

MLP4-2 Multimode Test Kit

Multimode Kit with Wave ID and Set Reference

The MLP4-2 test kit offers accurate fiber optic testing at an affordable price. Combining the OPM4-2D optical power meter and the OLS1-Dual LED light source in a rugged carry case, the MLP4-2 is a complete test kit for fiber optic LANs and WANs.

Test Kit Model	MLP 4-2	
Optical Light Source	OLS 1-Dual (single port)	
Wavelength (nm)	850 ±30	1300 +50/-10
Emitter type	Class 1 (IEC 60825 - 1)	
Connector	SC (FC & ST available)	
Optical Power Meter	OPM 4-2D	
Power Range	+6 to -50 dBm / +6 to -45 dBm for 850 nm	
Detector	Ge	

ORDERING INFORMATION

MLP4-2-XX	<i>MLP4-2 Test Kit (-XX = SC, FC, ST connector)</i>	\$1,195.00
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Test jumpers and connector adapters are required for operation (purchased separately).

MLP5-2 Multimode Test Kit

Wave ID, Set Reference, and Data Storage

The MLP 5-2 test kit raises field testing to new standards by combining our popular OPM 5-2D optical power meter, and the OLS 1-Dual LED light source in a rugged carrying case. Used during installations, the MLP 5-2 performs insertion loss measurements on multimode fiber at 850 and 1300 nm, as well as measurements on single-mode fiber at 1300 nm.

Test Kit Model	MLP 5-2	
Optical Light Source	OLS 1-Dual (single port)	
Wavelength (nm)	850 ±30	1300 +50/-10
Emitter type	Class 1 (IEC 60825 - 1)	
Connector	SC (FC & ST available)	
Optical Power Meter	OPM 5-2D	
Power Range	+6 to -60 dBm	
Detector	Ge	
Data Storage (Items)	Up to 500 per wavelength	

ORDERING INFORMATION

MLP5-2B-XX	<i>MLP5-2 Test Kit (-XX = SC, FC, ST connector)</i>	\$1,595.00
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Test jumpers and connector adapters are required for operation (purchased separately).



MLP1 Kit includes: OLS1 optical light source, OPM1-2C optical power meter, protective rubber boots, adapter cap, 50 and 62.5µm mandrels, user's guide, and carrying case.



MLP4-2 Kit includes: OLS1-Dual optical light source, OPM4-2D optical power meter, AA batteries, protective rubber boots, adapter cap, 50 and 62.5 µm mandrels, user's guide, and carry case



MLP5-2 Kit includes: OLS1-Dual optical light source, OPM5-2D optical power meter, AA batteries, protective rubber boots, adapter cap, USB cable, Windows® compatible software and user's guide, 50 and 62.5 µm mandrels, user's guide, and carry case.

NOYES POWER METERS & LIGHT SOURCES

NOYES CONTRACTOR SERIES TEST KITS

CKM-2 Fiber Optic Loss Test Kits

Multimode Test Kit with Set Reference

Combining the CSM1-2 optical power meter and CSS1-MM Dual LED light source, the CKM-2 is a cost-effective test kit designed for performing insertion loss measurements on multimode fiber optic links.

Weighing only 0.4 lb each, both units are compact and convenient for field use. The CSS1-MM Dual LED light source, and CSM1-2 optical power meter are fully N.I.S.T. traceable.

- Palm-sized, rugged, lightweight
- Certify multimode fiber links per TIA/EIA standards
- CW and modulated Tone
- 270, 330, 1000, and 2000 Hz supported Tone
- Power measurements in dBm or μ W; insertion loss in dB
- Reference power level storage
- Large LCD with Backlight
- Free 50 μ m and 62.5 μ m mandrels
- N.I.S.T traceable

Test Kit Model	CKM-2	
Optical Light Source	CSS1-MM (single port)	
Wavelength (nm)	850 nm \pm 20 nm	1300 nm +40/-60 nm
Emitter type	Class 1 (IEC 60825 - 1)	
Connector	SC	
Optical Power Meter	CSM1-2	
Power Range	+6 to -60 dBm	
Detector	Germanium (Ge)	
Data Storage (Items)	N/A	

CKSM-2 Fiber Optic Loss Test Kits

Multimode & Single-mode Test Kit with Set Reference

Combining the CSM1-2 optical power meter, CSS1-MM Dual LED light source, and CSS1-SM Dual LASER source, the CKSM-2 is a cost-effective test kit designed for performing insertion loss measurements on multimode as well as single-mode fiber optic links.

- Palm-sized, rugged, lightweight
- Certify multimode fiber links per TIA/EIA standards
- CW and modulated Tone
- 270, 330, 1000, and 2000 Hz supported Tone
- Power measurements in dBm or μ W; insertion loss in dB
- Reference power level storage
- Large LCD with Backlight
- Free 50 μ m and 62.5 μ m mandrels
- N.I.S.T traceable

Optical Light Source	CSS1-MM (single port)	
Wavelength (nm)	850 nm \pm 20 nm	1300 nm +40/-60 nm
Emitter type	Class 1 (IEC 60825 - 1)	
Connector	SC	
Optical Light Source	CSS1-SM (single port)	
Wavelength (nm)	1310 nm \pm 20 nm, 1550 nm \pm 20 nm	
Emitter type	Class 1 (FDA 21 CFR 1040.10 and 1040.11, and IEC 60825-1)	
Connector	UCI base and FC, SC, ST, or LC adapter	
Optical Power Meter	CSM1-2	
Power Range	+6 to -60 dBm	
Detector type	Germanium (Ge)	
Data Storage (Items)	N/A	



Kit includes:

CSS1-MM dual optical light source, CSM1-2 optical power meter, AA batteries, 2.5 mm Universal adapter cap, 50 and 62.5 μ m mandrels, user's guide, and carry case.

Test jumpers and connector adapters are required for operation (purchased separately).

ORDERING INFORMATION

CKM-2 CKM-2 Test Kit **\$795.00**



Kit includes:

CSS1-MM Dual LED source, CSS1-SM Dual Laser source, CSM1-2 optical power meter, AA batteries, 2.5 mm universal adapter cap, UCI-SC connector, 50 and 62.5 μ m mandrels, user's guide, and carry case.

Test jumpers and connector adapters are required for operation (purchased separately).

ORDERING INFORMATION

CKSM-2 CKSM-2 Test Kit **\$1,649.00**

NOYES SMLP SERIES OPTICAL LOSS KITS

SMLP4-4 Test Kit

Single-mode / Multimode Test Kit with Wave ID and Set Reference

The SMLP4-4 test kit combines the OPM4-2D optical power meter and OLS4 integrated LED and LASER light source and is ideally suited for testing fiber optic networks with hybrid (single-mode and multimode) cables.

- Certify multimode and single-mode links per TIA/EIA standards
- Wave ID - automatic wavelength identification and switching
- Dual Wave ID, single Wave ID, CW, and modulated Tone
- 270 Hz, 330 Hz, 1 kHz, and 2 kHz Tone
- Large LCD with Backlight
- Power measurements in dBm or μ W; insertion loss in dB
- Free 50 μ m and 62.5 μ m mandrels
- N.I.S.T traceable

Test Kit Model	SMLP4-4			
Optical Light Source	OLS4			
Optical	MM Optical Port		SM Optical Port	
Wavelength (nm)	850 \pm 30	1300 -10/+50	1310 \pm 20	1550 \pm 20
Emitter type	LED, Class 1 (IEC 60825 - 1)		Laser, Class 1 (FDA 21 CFR 1040.10 and 1040.11, and IEC 60825-1)	
Connector	SC (FC, ST, or LC available)		SC (FC, ST, or LC available)	
Optical Power Meter	OPM4-2D			
Power Range	+6 to -60 dBm			
Detector	Germanium (Ge)			
Data Storage (Items)	N/A			



Package includes:

OLS4 optical light source, OPM4-2D optical power meter, AA batteries, protective rubber boots, adapter cap, 50 and 62.5 μ m mandrels, user's guide, and carry case.

Test jumpers and connector adapters are required for operation (purchased separately).

ORDERING INFORMATION

SMLP4-4-XX SM/MM Test Kit w/ Wave ID & Set Reference **\$2,595.00**
 (-XX = ST, FC, SC Connector)

SMLP5-5 Test Kit

SMLP5-5 Single-Mode/Multimode Test Kit with Wave ID and Data Storage

SMLP5-5 Single-Mode/Multimode Test Kit with Wave ID, Set Reference and Data Storage The SMLP5-5 test kit combines the OPM5-2D optical power meter and OLS4 integrated LED and LASER light source and is ideally suited for testing fiber optic networks with hybrid (single-mode and multimode) cables.

- Certify multimode and single-mode links per TIA/EIA standards
- Wave ID - automatic wavelength identification and switching
- Dual Wave ID, single Wave ID, CW, and modulated Tone (on single-mode output)
- 270 Hz, 330 Hz, 1 kHz, and 2 kHz Tone
- Large LCD with Backlight
- Power measurements in dBm or μ W; insertion loss in dB
- Up to 500 test records per wavelength storage and download
- USB port for download of stored records
- Free 50 μ m and 62.5 μ m mandrels
- N.I.S.T traceable

Test Kit Model	SMLP5-5			
Optical Light Source	OLS4			
Optical	MM Optical Port		SM Optical Port	
Wavelength (nm)	850 \pm 30	1300 -10/+50	1310 \pm 20	1550 \pm 20
Emitter type	LED, Class 1 (IEC 60825 - 1)		Laser, Class 1 (FDA 21 CFR 1040.10 and 1040.11, and IEC 60825-1)	
Connector	SC (FC, ST, or LC available)		SC (FC, ST, or LC available)	
Optical Power Meter	OPM5-2D			
Power Range	+6 to -60 dBm			
Detector	Germanium (Ge)			
Data Storage (Items)	Up to 500 per wavelength			



Package includes:

OLS4 optical light source, OPM5-2D optical power meter, AA batteries, protective rubber boots, adapter cap, USB cable, Windows® compatible software and user's guide, 50 and 62.5 μ m mandrels, SMLP5-5 test kit user's guide, and carry case

Test jumpers and connector adapters are required for operation (purchased separately).

ORDERING INFORMATION

SMLP5-5-XX SM/MM Test Kit w/ Wave ID & Data Storage **\$2,995.00**
 (-XX = ST, FC, SC Connector)

JDSU POWER METERS & LIGHT SOURCES

JDSU OMK-5 / OMK-6 / OMK-7 TEST KIT

Pocket-sized Optical Test Kits

All JDSU OMK optical test kits include one power meter and one light source as standard. Each kit is packaged in its own field carrying case including cables and accessories.

OMK-5, OMK-6 and OMK-7 are handy, pocket-sized instruments optimized for absolute power and loss measurements.

Features:

- Verification, installation, maintenance and surveillance.
- Easy report generation
- Simple reliable operation
- Rugged, compact and lightweight



SPECIFICATIONS

	OMK-5	OMK-6	OMK-7
LIGHT SOURCE	OLS-5	OLS-6	OLS-6
Wavelength (nm)	850, 1300	1310, 1550	1310, 1550
Emitter Type	LED	Laser	Laser
Connector Style	SC	FC/PC or SC/PC	SC/PC
METERS	OLP-5	OLP-6	OLP-8
Power Range	-60 to +5dBm	-65 to +10dBm	-50 to +23dBm
Wavelength (nm)	820, 850, 1300, 1550	850, 1300, 1310, 1490, 1550	980, 1310, 1480, 1550
Data Storage (Items)	N/A	N/A	N/A

ORDERING INFORMATION

2126/05	OMK-5 Basic Optical Test Kit - Datacom	\$1,340.00
2126/06 (FCPC)	OMK-6 Basic Optical Test Kit Telecom, FTTx (termination only) - FC/PC	\$1,700.00
2126/62 (SCPC)	OMK-6 Basic Optical Test Kit Telecom, FTTx (termination only) - SC/PC	\$1,700.00
2126/07 (FCPC)	OMK-7 Basic Optical Test Kit Multimedia / CATV - FC/PC	\$2,750.00
2126/75 (SCPC)	OMK-7 Basic Optical Test Kit Multimedia / CATV - SC/PC	\$1,950.00

JDSU OLS-5 / OLS-6 LIGHT SOURCE

Pocket-sized Dual Wavelength

- OLS-5 is for multimode at 850 and 1300 nm
- OLS-6 is for single mode at
 - 1310 and 1550 nm or at
 - 1550 and 1625 nm or at
 - 1490 and 1550 nm
- FTTx ready



Quick charger for NiMH or NiCd cells (accessory)

SPECIFICATIONS

MULTIMODE SOURCE	2255/01
Wavelength (nm)	850, 1300
Emitter Type	LED
Connector Style	ST
SINGLEMODE SOURCE	2255/02
Wavelength (nm)	1310, 1550
Emitter Type	Laser
Connector Style	FC
MULTIMODE SOURCE	2255/45
Wavelength (nm)	1310, 1550
Emitter Type	Laser
Connector Style	SC

JDSU OLP-5, OLP-6, OLP-8

Pocket-sized Optical Power Meters

The JDSU OLP product line of pocket-sized optical power meters provides an excellent price/performance ratio for universal, singlemode loss test and systems power measurements.

- Rugged, compact and lightweight
- Reliable basic functionality
- Singlemode & multi-mode applications
- Universal push pull interface (2.5/1.25 mm)
- Standard AA batteries or NiMH/NiCd cells

SPECIFICATIONS

METER	OLP-5
Measurement Range	-60 to +5dBm
Wavelength (nm)	820, 850, 1300, 1550
METER	OLP-6
Measurement Range	-65 to +10dBm
Wavelength (nm)	850, 1300, 1310, 1490, 1550
METER	OLP-8
Measurement Range	-50 to +23dBm
Wavelength (nm)	980, 1310, 1480, 1550



ORDERING INFORMATION

2256/01	OLP-5 Pocket Optical Power Meter - Datacom	\$368.00
2256/02	OLP-6 Pocket Optical Power Meter - Telecom, FTTx	\$415.00
2256/03	OLP-8 Pocket Optical Power Meter - Hi Power	\$520.00



OVF-1 Visual Fault Locator (accessory)

ACCESSORIES AND SUPPLIES

2229/90.21	OCK-10 Cleaning kit	\$189.00	2252/01	OVF-1 Visual Fault Locator	\$240.00
222990.07	Optical connector cleaning tape	\$165.00	2237/90.02	NiMH Battery Cells	\$4.00

AGILENT WireScope™ Pro Hand-held Network Performance Analyzer

WireScope™ Pro – An Expandable Platform

Providing the fastest Category 6 cable and fiber certification on the market, the WireScope™ Pro is designed to meet present and future cabling standards. WireScope™ Pro supports cable certification to TIA Categories 3 to 6, Augmented Category 6 and Category 7 limits, and ISO Classes C through F. The WireScope™ Pro provides investment protection because it grows with its users' needs, offering a lower cost Category 6 product and supporting upgrades later as needed.

Test Parameters

- Supported frequency range: 1 MHz to 1000 MHz
- TIA Level IV accuracy

Supported Tests

- Attenuation (Insertion Loss)
- Near End Crosstalk (NEXT) in pair to pair and/or PowerSum format
- Equal Level Far End Crosstalk (ELFEXT)
- Return Loss and Loop Resistance
- Ambient noise versus frequency
- Wiremap
- Cable length, Total propagation delay and delay skew between pairs
- PSANEXT, PSAELFEXT

Test Standards

- TIA/EIA-606-A and TIA/EIA-568-B Category 3 through 7
- ISO/IEC 11801, EN 50173 and Australia/New Zealand Classes C, D, E and F
- UTP, STP, and SCTP cabling
- IEEE 802.3 10BASE-T, 100BASE-TX, 1000BASE-T, 10GBASE-T
- IEEE 802.5 Token Ring and IBM Type 1
- UTP and fiber PMD interfaces

Power Supply

- Removable/Rechargeable Lilon batteries provide 5 to 8 hours of continuous operation.
- AC Power adapter: 100-240 V AC, plugs into the battery. Can be recharged separately.

Memory

- 64 MByte internal flash memory
- 128 MByte USB Flash Drive included, allows for flexible test record storage

Connectivity

- Probe Interface Connector
- Auxiliary 10/100 Mbit/s Ethernet port, RJ-45
- Universal Serial Bus (USB 1.1) port
- Talkset interface: 3.5 mm stereo jack

Software Upgrade

- Semi-automated software upgrade from Agilent ftp site, or using USB Flash Drive, or using USB connection to PC.



All WireScope™ Pro Kits contain:

- (1) WireScope™ Pro, (1) DualRemote™ Pro, (1) Category 6 Cable Test Software License, (2) AC Power adapters, (1) Soft Carrying Case, (2) Hanging Straps, (2) Category 6 Channel Probe, (2) Category 6 Universal Link Probe, (1) USB Cable, (1) ScopeData Pro Software, (1) ScopeData Pro User's Guide, (1) WireScope™ Pro User's Guide, (1) WireScope™ Pro Utilities CD Kit, (1) 128MB USB Flash Drive

ORDERING INFORMATION

N2640A-100	<i>Cat 6 Certification Kit (Copper Only)</i>	\$7,326.00
N2642A-130	<i>Cat 6 Multimode Certification Kit</i>	\$10,465.00
N2642A-140	<i>Cat 6 Singlemode Certification Kit</i>	\$11,523.00
N2643A-150	<i>Cat 6 Multimode & Singlemode Cert. Kit</i>	\$15,395.00

OPTIONAL ACCESSORIES AND SUPPLIES

N2641A-135	<i>Removable Lithium ion (Li-ion) Battery Pack</i>	\$257.00
N2643A-100	<i>Cat 6A/7 Feature Enabling Software License</i>	\$1,030.00
N2648A-100	<i>Alien Cross Talk Kit (license + stimulator pair)</i>	\$2,474.00
N2644A-100	<i>6A Universal Channel SmartProbes (set of 2)</i>	\$322.00

AGILENT FrameScope™ Pro Handheld Triple Play Service Quality Test and Gigabit Ethernet Troubleshooting

The FrameScope™ Pro is Agilent's handheld 10/100/1000 Mbit/s Ethernet deployment and troubleshooting tool. With the FrameScope™ Pro, technicians deploying Ethernet in Metro networks now have a fast, efficient and very cost effective test solution for measuring bandwidth at line rates from 1 Mbit/s to 1 Gbit/s.

Supported Tests

- Autotest performance measurement of Email, Web, File, DNS, DHCP, WNS, Novell, Print, FTP, Primary DC, Secondary DC Servers, Switches and Routers.
- Ping, Trace Route, and SNMP Queries verify connectivity to user defined devices.
- Statistical analysis of the network condition.
- Traffic Generator up to full line rate at 10/100/1000 Mbit/s speeds.
- RFC 2544 tests for throughput, latency, back-to-back frames and frame loss measurement at full 1 Gbit/s line rate.
- VLAN tag and priority fields are configurable.
- QoS IP TOS and DSCP settings are configurable.
- IP and MAC Loopback measure precise roundtrip delay at layer 2 (MAC) or layer 3 (IP).
- Locate Switch Port & Blink Hub Port locates live network cable connections.
- Network Database stores station information.
- Wiremap Test to locate miswires using the Wiremap Adapter.

Test Interfaces

- 10/100/1000BASE-T copper interface
- Supported SFP fiber interfaces: SX, LX and ZX

Supported Protocols

- IP, IPX, NetBIOS

Memory

- 32 MB CompactFlash™ card included

Power

- Removable/Rechargeable Lithium Ion batteries
- Battery life: 5 to 8 hours of operation
- AC Power adapter: 100 – 240 V AC, 0.5 A, 47 – 63 Hz (output 12 V DC, 1.5 A)

User Interface

- 2.38" x 6.25" (60 mm x 160 mm) touch-sensitive color LCD display screen

Dimensions

- Size: 9" x 4.5" x 2.6" (228 mm x 114 mm x 66 mm)
- Weight: 2.5 lbs. (1.2 kg)

Ports

- Universal Serial Bus (USB 1.1)
- Talkset Interface: 3.5 mm stereo jack
- CardBus Interface



ORDERING INFORMATION BASE UNIT

N2620A-003	<i>FrameScope Pro Handheld GigE Analyzer</i>	\$5,649.00
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OPTIONAL LICENSES

N2620A-030	<i>VoIP Testing License (Standard Slip Stack)</i>	\$1,052.00
N2620A-031	<i>RFC 2544 Testing License</i>	\$1,949.00
N2620A-03G	<i>VoIP Traffic Generator License</i>	\$1,187.00
N2620A-055	<i>ADSL/ADSL2+ Annex A Kit (modem + license)</i>	\$1,265.00
N2620A-056	<i>ADSL/ADSL2+ Annex B Kit (modem + license)</i>	\$1,262.00
N2620A-071	<i>IPTV Test License, Frame Analysis</i>	\$1,871.00

JDSU COPPER / NETWORK TESTERS

JDSU SmartClass ADSL

ADSL Service Installation Tester

The JDSU SmartClass ADSL is the perfect tool for the field engineer installing and maintaining ADSL services. The simple user interface, including graphical display and telephone style keypad, allows field engineers to quickly configure and verify performance of ADSL service. The ADSL layer measurements allow the field engineer to verify key parameters that will ensure the long term reliability of the customer's circuit. The built in data layer functionality allows the field engineer to verify that the end customers can achieve full authentication and access internet IP addresses. The built-in 10M Ethernet ensures that the service can be tested, not only at the DSLAM, MDF, cross-box, or NID (customer premise), but also at the customers PC interface.



ORDERING INFORMATION

SC-DSLA	SmartClass Silver ADSL2+ Annex A Package	\$1,795.00
SC-DSLB	SmartClass Silver ADSL2+ Annex B Package	\$1,795.00
SC-DSLA-CU	SmartClass Gold ADSL2+ Annex A & Cu Package	\$2,195.00
SC-DSLB-CU	SmartClass Gold ADSL2+ Annex B & Cu Package	\$2,195.00

JDSU Test-Um Product Line



JDSU Network and Enterprise Test tools are designed for the requirements of customers who install, manage and maintain premises, enterprise, and broadband access networks. These task-ready, or single-task, test instruments are easy-to-use and allow technicians to Know the Network is ready to support the broad set of advanced communications, entertainment, and commercial applications used by consumers and businesses today.

From cabling testers and Ethernet network management tools to fiber optic and xDSL test instruments, JDSU Network and Enterprise solutions remove test complexity and allow you to Know the Network is ready for reliable, high-quality performance.



Task-ready test tools from JDSU include the Test-Um line of enterprise network and home wiring test instruments, acquired by the company in April 2006, as well as those addressing the broadband access network test requirements of telecommunications and cable service providers.

JDSU Validator-NT™

All-in-One Network Management Tool *No other tester/certifier does so much, so easily, and so economically.*

Validator-NT's patented method of uploading and downloading information about cable tests and network configuration will help you to gather the necessary information to manage your network easily, while documenting changes, upgrades or new configurations. Clear, fast Speed and Performance Certification up to 1 Gigabit combines with powerful planning software and active network capabilities to give you the complete tool for installing, managing and fine-tuning any Ethernet network.

- Certifies CAT5, CAT5E and CAT6 Ethernet cables to be 1EEE compliant to 1 gigabit speed for all Ethernet systems
- Tests to TIA 568/570 interconnect standards
- Tests coax, telephone, audio and security cables
- Qualifies VoIP lines
- Includes powerful Plan-Um™ Cabling Project Management software
- Creates and prints job reports and cable labels
- Active network capabilities for test, link and identification
- Certify, identify, configure and document your network

Kit includes:

Validator-NT Main Unit and Smart Remote, 2 lithium-ion rechargeable long-life batteries, 2 AC adapter/charger units, 4 adapter cable assemblies, Set of 8 wiremap remotes, USB cable assembly, Compact flash card, Plan-Um™ design layout software, Deluxe carrying case with cushioned sides.



ORDERING INFORMATION

NT955	Validator-NT™ Ethernet Speed Certifier	\$1,622.25
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JDSU Validator™

Network/Cabling LAN Certifier NT950

Designed specifically for Ethernet systems, the Validator™ NT950 measures and presents digital speed and performance results on CAT5, CAT5e, and CAT6 cables to ensure the cabling will do the job it's rated to do. Included software stores and organizes data into reports for billing, and archives network system information for later use in modifying or upgrading previously-installed systems.

Key Features

- Shows Pass/Fail, cable length and speed rating
- Create custom floor plans or import existing AutoCAD/Visio files
- Show specific ports for network, telephone and cable
- Print end-of-job report for billing purposes
- Print/email and save layouts for approval

Kit includes:

Validator™ main unit and smart remote, 2 lithium ion rechargeable long-life batteries, 2 AC adapter/charger units, 4 adapter cable assemblies, USB cable assembly, Compact flash card, Plan-Um™ design layout software, Deluxe carrying case with cushioned sides.



ORDERING INFORMATION

NT950	Validator™ Ethernet Speed Certifier Kit	\$1,265.40
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JDSU LanScaper™

Network Tester NT700 / NT750

The NT700 and NT750 is a network management device that combines cable testing and length measurement with the capability to monitor and correct network problems connected with the physical layer and link conditions of the network.

Key Features

- Wiremaps network connections with remote identifiers
- Displays advertised network speed/duplex
- Measures and reports any voltage on lines
- Generates multiple tone levels for signal tracing and cable identification

NT700 includes:

LanScaper, Remote #1, 12" cable assembly, RJ45 to alligator clip set, 2 pieces TP40, 12" cable assembly, unshielded RJ45 connectors, 2 pieces TP56, 7.5" cable assembly with no-fault RJ12 connectors for RJ11 and RJ45 jacks, 2 pieces TP20, Pouch PC150.

NT750 includes:

NT700 main unit with remote, Tone Tracer (TT100), 8 remote identifiers, RJ45 to coax adapter cables (TP50), F to BNC adapter (TP62), Carrying case.



ORDERING INFORMATION

NT700	LanScaper NT700 Network Tester	\$334.71
NT750	LanScaper NT750 Network Tester Kit	\$453.44

JDSU LanRoamer™

Tester/Analyzer TP500

This smart tester offers a new price/performance level for verification of wiring faults and configurations on data cable.

Package includes:

LanScaper, Remote #1, 12" cable assembly, RJ45 to alligator clip set, 2 pieces TP40, 12" cable assembly, unshielded RJ45 connectors, 2 pieces TP56, 7.5" cable assembly with no-fault RJ12 connectors for RJ11 and RJ45 jacks, 2 pieces TP20, Pouch PC150.



ORDERING INFORMATION

TP500	LanRoamer™ Cable Tester and Fault Analyzer	\$85.53
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JDSU LanRoamerPRO™

Tester/Analyzer TP600

This high-performance length measurement CAT 5/6 tester analyzes wiring faults and configurations on data cable.

Package includes:

LanRoamerPRO™, Remote #1, 12" (30.48 cm) cable assembly, RJ45 to alligator clip set TP40, 12" (30.48 cm) cable assembly, unshielded RJ45 connectors, 2 pieces TP56, Laminated quick reference card, Wire configuration sticker, Pouch PC150.



ORDERING INFORMATION

TP600	LanRoamerPRO™ Cable Tester/Analyzer + Remote	\$171.88
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JDSU LanRoamerPRO™ Kit

Test Kit TP607

Kit includes:

LanRoamerPRO™, Remotes #1-#8, 12" (30.48 cm) cable assembly, RJ45 to alligator clip set TP40, RJ45 to coax adapter, 2 pieces TP50, 12" (30.48 cm) cable assembly, unshielded RJ45 connectors, 2 pieces TP56, Wire configuration sticker, Laminated quick reference card, Carrying case PC400.

ORDERING INFORMATION

TP607	LanRoamerPRO™ Test Kit + 8 Remotes	\$287.86
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JDSU COPPER / NETWORK TESTERS

JDSU Tri-Porter™

Premises Wiring Tester for Voice, Data & Video

The all-in-one, low-cost, triple-play testing solution.

Tri-Porter™ IVT600-The Network Qualification and Testing Tool The first network installation tester that provides a full range of physical wiring tests for the fast, efficient delivery of IP-based voice, data and video services in the home or small office with one integrated tool.

Tri-Porter™ replaces up to 6 traditional testing tools.

Testing and verifying IP-based services in your customers' premises now takes less time and is more convenient and economical than ever before. Coax runs, network systems and voice/telemetry lines are all easily tested and verified for service levels to assure optimal performance.

Network Testing: 10Mb or 100Mb Ethernet

Cable Types: Shielded or unshielded CAT-3, CAT-5, CAT-5E or CAT-6; coax; 2-, 4- and 6-pair telephone cabling.

Tri-Porter™ comes with a handy carrying case, which holds both the main unit and the remote tester/tracer, along with the 20-piece wiremapping sets for remote discovery of telephone, coax, and network cables.



ORDERING INFORMATION

IVT600	Tri-Porter™ Premises Wiring Tester for VDV	\$799.00
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JDSU Testifier™ TP350

Cable Tester and Verifier



Key Features

- LCD display
- Easy-to-read results
- Built-in remote
- Auto-off
- Unbreakable case

Package includes:

Testifier™, #1 replacement remote TP309, #1 coax remote identifier TP65, 12" (30.48 cm) cable assembly, RJ45 to alligator clip set TP40, 7.5" (19.05 cm) cable assembly with no-fault RJ12 connectors for RJ11 or RJ45 jacks TP20.

The new Test-Um TP350 Testifier produces the most accurate and easy-to-understand results of any cable tester/verifier on the market. Its large LCD display is easy to read--it shows a clear picture of a wired cable; data, coax, telephone, security/alarm, or unterminated site wire.

A powerful, precise and professional cable tester/verifier for all wired cable runs, including: network, coax, telephone, audio, security.

CATV, telephone systems, audio cable, security/alarm wiring, and network cabling can all be tested and located using the Resi-Tester™ (TP350) and optional room identifier sets. Multiple input ports and included adapter cables mean any wire can be attached and tested!

ORDERING INFORMATION

TP350	Testifier™ Cable Tester	\$111.54
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JDSU Wi-Net Window™

Wireless Network Analyzer

To install, expand or operate a wireless network, you need to see critical information about where the best location is for components, what access should be allowed and where or what security is in place. The Wi-Net Window™ WP150 handheld analyzer provides information on the types of wireless networks that surround you.



ORDERING INFORMATION

WP150	Wi-Net Window™ Wireless Network Analyzer	\$280.75
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JDSU Wi-Net Window™ Kit

Wireless Analyzer + Testifier™

Perfect for installers and technicians setting up wired and wireless applications.

Kit includes:

Wi-Net Window™ WP150 Wireless Network Tester & Testifier™ TP350 Tester in a Zipper Nylon Case with Storage Pockets



ORDERING INFORMATION

KP255	Wired Wireless Kit	\$366.29
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JDSU Net-Rite™

Ethernet Network Tester

The Net-Rite™ TP250, a continuity and wiremap tester for Ethernet cable, tests and troubleshoots faults and miswires. This continuity/wiremap tester detects and troubleshoots faults and miswires in Ethernet cable up to 1000 ft (304.8 m) long. Its removable remote enables testing longer cable runs terminated in different areas.

Applications: Tests Ethernet cable for opens, shorts, split pairs, miswires and reversals.

ORDERING INFORMATION

TP250	Net-Rite™ Continuity and Wiremap Tester	\$48.38
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TP250 includes

Net-Rite™ main unit, Remote, Four batteries



JDSU / WESTOVER

Video Inspection Probe Solution



Westover FBP Series probe microscopes revolutionized the industry by providing a compact design that fits in the palm of your hand, rugged drop-tested performance and precision tips that positively mate with the interface device so the fiber is easy to locate and examine. Competitive designs utilize poorly-conceived inspection tips and require extensive user training before they can be used in service. A complete inspection system requires a probe (video microscope), a tip suitable for the connector you are inspecting, and a display. Over the years our product line has grown to offer many choices for probes, displays and tips.



The FBP Series is the industry standard and occupies a massive market share due to its proven overall performance. Our most common model features dual magnification with a quick-change magnification wheel, which requires only a touch of refocus when changing the magnification setting. Value-priced single-magnification models are also available.

ORDERING INFORMATION

FBP-P1	Video Inspection Probe, NTSC, 200x, 4-pin Out	\$950.00
FBP-P1-400	Video Inspection Probe, Single Mag, 400x, 4 pin	\$935.00
FBP-P100	Quick Capture Probe, NTSC, 200x, 6-pin Out w/USB	\$1,997.50
FBP-P105	Quick Capture Probe, NTSC, 200x, 6-pin Out, No USB	\$1,250.00
FBP-P2	Video Inspection Probe, PAL, 200x, 4-pin Out	\$995.00
FBP-P5	Video Inspection Probe, NTSC, 200/400x, 4-pin Out	\$1,400.00
FBP-P500	Quick Capture Probe, NTSC, 200/400x, 6-pin Out, No USB	\$2,650.00
FBP-P505	Quick Capture Probe, NTSC, 200/400x, 6-pin Out, No USB	\$1,850.00
FBP-P6	Video Inspection Probe, PAL, 200/400x, 4-pin Out	\$1,395.00
FBP-P7	Video Inspection Probe, NTSC 250/500x, 4-pin Out	\$1,317.50
FBP-PX1	Video Inspection Probe, NTSC, 200x, 4-pin Out, No Barrel	\$765.00
FBP-PX2	Video Inspection Probe, PAL, 200x, 4-pin Out, No Barrel	Call for price
FBP-PX5	Video Inspection Probe, NTSC, 200/400x, 4-pin Out, No Barrel	\$1,020.00

FBP probes are available in either 4-pin or 6-pin versions. The 6-pin models include a QuickCapture™ button that, when used in conjunction with a 6-pin USB module, allows for single-handed operation with a PC.



Quick Capture Analog Probes



Analog Probes



Digital Output Probes

MILLER

Fiber Optic Inspection Microscope

3 built-in magnifications zoom from 150x to 175x to 200x. Universal adapter fits nearly all ST, SC and FC connector ferrules. Adjustable light path for direct lighting or backlighting of connectors.



ORDERING INFORMATION

FIM-150-200	Fiber Optic Inspection Microscope	\$159.06
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NOYES

Fiber Optic Inspection Scope

The Noyes OFS-300 with universal adapter (ST, FC & SC) is a versatile instrument used to inspect fiber optic connectors. Recommended for both multimode and single-mode applications. Operates on 2 AA alkaline batteries. Call for additional adapters.



ORDERING INFORMATION

OFS-300-200C	Noyes 200X Scope w/ 2.5mm adapter	\$399.00
OFS-300-400C	Noyes 400X Scope w/ 2.5mm adapter	\$449.00

JDSU / WESTOVER

Hand-Held Microscopes

The FM-L200 is a ruggedized field scope with magnification of 200x and oblique illumination. It comes with a universal 2.5mm adapter (ST, SC, and FC connectors).



ORDERING INFORMATION

FM-L200	Hand Held Microscope, 200X, Universal	\$200.00
FM-C400	Hand Held Microscope, 400X, Coaxial	\$240.00
FM-DI200	Westover 200x Dual Illumination Scope	\$240.00

FOM

Mini Hand-Held Microscope

The Mini Hand-Held Microscope is available in 100x and/or 200x magnification. White LED lighting is powered by two "3V" Lithium cell batteries.



ORDERING INFORMATION

FOM-HHMS100	FOM 200X Microscope	\$169.00
FOM-HHMS200	FOM 400X Microscope	\$169.00

VISUAL FAULT LOCATORS

FOM Fault Locator

Pocket Visual Fault Locator

The FOM Pocket Fault Locator is rugged and lightweight. The unit has a 30 hour battery life in continuous mode and 40 hours in modulated mode. The bright 650 nm laser in the Pocket Fault Locator ensures fast and easy location of loss points in patchcords, patchpanels and enclosures.



Furthest 7K Distance!

ORDERING INFORMATION

FOM-9000	FOM Pocket Visual Fault Locator	\$139.95
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WILCOM MT-RJ

Visual Fault Locator

The Wilcom MT-RJ Visual Fault Locator is used for finding breaks and/or tight bends in multimode optical fibers. The F6240 incorporates a fixed male MT-RJ duplex receptacle, and independently launches a bright visible red laser into channel A or channel B fiber for quick continuity testing.



Benefits

- Low-Cost and Palm Sized
- Multimode Operation
- MT-RJ Optical Output Port
- LED Indicators
- Pulsed Output Mode
- 650nm Red Laser

ORDERING INFORMATION

F6240	Wilcom MT-RJ Visual Fault Locator - Hand-held	\$895.00
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NOYES HiLite & VFI2

Visual Fault Identifiers

The HiLite and VFI 2 are compact but powerful visible red laser sources designed to troubleshoot faults on fiber optic cables. Light generated by these units will escape from sharp bends and breaks in jacketed or bare fibers, as well as poorly mated connectors. They can identify faults in fiber optic jumper cables, distribution frames, patch panels, and splice trays.

The HiLite and VFI 2 are an excellent complement to an OTDR because they can locate faults inside the OTDR's dead-zone. Other applications include end-to-end continuity checks, identifying connectors in patch panels and fibers during splicing operations. The universal connector interface provides fast operation with many connector styles without changing an adapter.

ORDERING INFORMATION

VFI 2	VFI 2 unit, instruction card, and carrying case.	\$379.00
HILITE	HiLite unit, instruction card, and carrying case.	\$279.00

NOYES MT Tracer

12-Fiber Visible Laser Source & Display

The MT Tracer is a compact multi-fiber visual fault identifier (red laser source) supporting 8 or 12 fiber MTP® connections. The MT Tracer Display is a passive optical device designed to receive the light from the MT Tracer Source and provide an eye-safe method of viewing the red light. Identification is accomplished by expanding the output of the MT ferrule to a large easy to read panel - large enough to be read from several feet away.

ORDERING INFORMATION

MT_Tracer_Kit	MT Tracer Source, MT Tracer Display, batteries, instruction card, and carry case.	\$2,995.00
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EXFO FLS-240 Pocket Pal

Visual Fault Locator

The Pocket Pal is the easiest way to identify fibers from end to end and locate polished connector endfaces. Its red laser shines through most yellow-jacketed fibers to help you pinpoint breaks, bends, faulty connectors, splices and other causes of signal loss. It has a reach of up to 5 km. The convenient FLS-240 locates faults visually by creating a bright red glow at the exact location of the fault on singlemode or multimode fibers.



ORDERING INFORMATION

FLS-241-UNIV	Pocket Pal VFL - 635nm Wavelength, 2.5mm sleeve	\$370.00
GP-1008	VFL Adapter (2.5mm to 1.25mm)	\$125.00

WILCOM Pen-Style VFL

Pocket Visual Fault Locator

The Wilcom Pocket Visual Fault Locator is a pencil style that features a universal connector accepting any optical connector style with a 2.5mm ferrule. The F6230A emits a visible red light, which can be seen for up to 5 km. Designed for singlemode and multimode.



ORDERING INFORMATION

F6230A	Pocket VFL w/ Universal Adapter	\$280.00
30032232-01	F6230A Adapter - Converts 2.5mm to 1.25mm	\$95.00

Features

- 650 nm visible red laser source
- Compact size
- High power (1 mW)
- Universal connector interface for quick connection



VFI2



HiLite

